

# CSE 102 Homework Assignment 3 (Due: Oct 18 11:55 pm)

You are going to write a complete C program which implements the following functionality:

- You are given a file which contains lines of character strings of various sizes. Your program should read the given file and locate the following 5 strings:
  - Xanthos
  - Patara
  - Myra
  - Arycanda
  - Phaselis
- The 5 constant strings can appear vertically or horizontally. Once all the strings are found, your program should print their head position and the orientation to the terminal.
- Code it so that it reads a text file named `input.txt`

## Example

Contents of the input file:

```
askjdkdanmowflfkadjkaksklskksadllasd  
fkfklsal;sdlslfsdkdfkMyraslfsfeokdlasdfdf  
wfewfPsdflsdfklsdosfkeowkfweofkwoefkkfsf
```

sdfsdakjewofksdfoiwe fjowefks;dfPhaselissdfkefowefjksdlfjsl fjsldfj  
oefkwtifjslflsdfkjeifjsl;asldkiefjiefjlskfdjeifjksk  
sdlfkawioAjk sdlfkeifsflkefjiwfejsllfjeighghj;wp  
dfkjerwfjr;s;dlskfj fiefwflwekfjwlefiehgwe fjw  
sdfkka fwXanthosdkfjlsAfdjiefeiwowe fwe fiefjowiefehgl;lewofjefw  
iieoefnFGSAiejfiwefjhrwefi iwe fjw jefihhwefklskdf  
skkfjwifjwiiwiefiefwfy[pw pfjwifwefijijwhi]  
sdfijwiefjiwhiwe fjwiefjwefi;ai ajdijeifwuiefhwoeifjowehi  
iiwefiwefjwiefjwiefjiajiefi iwe jflkajsd lkjfi ewhfiwefjowiefhaskjlskdfu  
iwjefijefmmiewifjwe ifnklksjdiaifwefpwefijfiwf0W0EFIEWfnweiuf  
jfnwefiwfpwfjie jfiwefdjwfl ljfwiefjiwefwfl ijijfi ewfhu  
kkfiefiewp fkfj fjhewfoawefkwoefoejwfowoe fkowefkowo

Output:

Xanthos (8,9) Horizontal  
Patara (3,6) Vertical  
Myra (2,22) Horizontal  
Arycanda (8,22) Vertical  
Phaselis (4,32) Horizontal

## Remarks:

- Strings which correspond to rows are separated by whitespace.
- Maximum length of each row is 250
- Maximum number of rows is 100

## Turn in:

A complete C program `<assignment_3_name_id.c>` which can be compiled using the following command:

```
gcc -std=c99 assignment_3_name_id.c -o assignment_3_name_id
```

## Caution:

- Read and apply “Assignment Submission Rules and Other Related Information” document which available on the class e-learning system.
- You may or may not get partial credit depending on how you structured or documented your code.